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1 Identification of the substance/mixture and of the company/undertaking

· 1.1. Product identifier

· Trade name: Neomycin-sulfate

· Article number: 30250

· CAS Number: 1405-10-3 · EC number:

· **EC number** 2157731

- · 1.2. Relevant identified uses of the substance or mixture and uses advised against
- · Application of the substance / the preparation Laboratory chemicals
- · 1.3. Details of the supplier of the safety data sheet
- · Manufacturer/Supplier:

SERVA Electrophoresis GmbH

Carl-Benz-Str. 7 D-69115 Heidelberg Tel.: +49 6221 13840-0 FAX: +49 6221 13840-10 msds.info@serva.de

- · Information department: Product Safety department Tel.: +49 6221 13840-35
- · 1.4. Emergency telephone number: +49 6131 19240 (university hospital Mainz)

2 Hazards identification

- · 2.1. Classification of the substance or mixture
- · Classification according to Regulation (EC) No 1272/2008



GHS08

Resp. Sens. 1 H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.

Repr. 2 H361d Suspected of damaging the unborn child.



Skin Irrit. 2 H315 Causes skin irritation.

Eye Irrit. 2 H319 Causes serious eye irritation.

Skin Sens. 1 H317 May cause an allergic skin reaction.

STOT SE 3 H335 May cause respiratory irritation.

· Classification according to Directive 67/548/EEC or Directive 1999/45/EC

Xn; Harmful

R63: Possible risk of harm to the unborn child.

Xn; Sensitising

R42/43: May cause sensitisation by inhalation and skin contact.

Xi; Irritant

R36/37/38: Irritating to eyes, respiratory system and skin.

· Classification system:

The classification was made according to the latest editions of the EU-lists, and expanded upon fom company and literature data.

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· 2.2. Label elements

· Labelling according to Regulation (EC) No 1272/2008

The substance is classified and labelled according to the CLP regulation.

- · Hazard pictograms GHS07, GHS08
- · Signal word Danger
- · Hazard statements

H315 Causes skin irritation.

H319 Causes serious eye irritation.

H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.

H317 May cause an allergic skin reaction.

H361d Suspected of damaging the unborn child.

H335 May cause respiratory irritation.

· Precautionary statements

P280 Wear protective gloves/protective clothing/eye protection/face protection.

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if

present and easy to do. Continue rinsing.

P302+P352 IF ON SKIN: Wash with plenty of soap and water.

P304+P341 IF INHALED: If breathing is difficult, remove victim to fresh air and keep at rest in a

position comfortable for breathing.

P342+P311 If experiencing respiratory symptoms: Call a POISON CENTER or doctor/physician.

P405 Store locked up.

· 2.3. Other hazards

· Results of PBT and vPvB assessment

· **PBT**: Not applicable. · **vPvB**: Not applicable.

3 Composition/information on ingredients

· 3.1. Chemical characterization: Substances

· CAS No. Description:

1405-10-3 Neomycin, sulfate (salt)

- · Identification number(s):
- · EC number: 2157731
- · Description:
- · Empirical formula: C23 H46 N6 O13 * H2 S O4
- · MW: 614,7

4 First aid measures

- · 4.1. Description of first aid measures
- · General information Remove contaminated clothing.
- · After inhalation Supply fresh air and to be sure call for a doctor.
- · After skin contact Immediately rinse with water.
- · After eye contact

Rinse opened eye for several minutes under running water. If symptoms persist, consult doctor.

- · After swallowing Drink copious amounts of water and provide fresh air. Call for doctor immediately.
- · Information for doctor
- · 4.2. Most important symptoms and effects, both acute and delayed

No further relevant information available.

· 4.3. Indication of any immediate medical attention and special treatment needed

No further relevant information available.

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5 Firefighting measures

- · 5.1. Extinguishing media
- · Suitable extinguishing agents

CO2, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.

· 5.2. Special hazards arising from the substance or mixture

In case of fire, the following can be released:

Nitrogen oxides (NOx)

Sulphur dioxide (SO2)

Carbon monoxide (CO)

- · 5.3. Advice for firefighters
- · Protective equipment: Wear self-contained respiratory protective device.

6 Accidental release measures

- 6.1. Personal precautions, protective equipment and emergency procedures Wear protective clothing.
- 6.2. Environmental precautions: Do not allow to enter sewers/ surface or ground water.
- · 6.3. Methods and material for containment and cleaning up:

Pick up mechanically.

Dispose contaminated material as waste according to item 13.

Ensure adequate ventilation.

· 6.4. Reference to other sections

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

7 Handling and storage

- · Handling
- · 7.1. Precautions for safe handling

Ensure good ventilation/exhaustion at the workplace.

Prevent formation of dust.

· Information about protection against explosions and fires:

Dust can combine with air to form an explosive mixture.

- · 7.2. Conditions for safe storage, including any incompatibilities
- · Storage
- · Requirements to be met by storerooms and receptacles: No special requirements.
- · Information about storage in one common storage facility: Not required.
- · Further information about storage conditions:

Store in cool, dry conditions in well sealed receptacles.

This product is hygroscopic.

Protect from exposure to the light.

 \cdot 7.3. Specific end use(s) No further relevant information available.

8 Exposure controls/personal protection

- · Additional information about design of technical systems: No further data; see item 7.
- · 8.1. Control parameters
- · Components with limit values that require monitoring at the workplace: Not required.
- · Additional information: The lists that were valid during the creation were used as basis.
- · 8.2. Exposure controls
- · Personal protective equipment
- · General protective and hygienic measures

Keep away from foodstuffs, beverages and feed.

Immediately remove all soiled and contaminated clothing

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Wash hands before breaks and at the end of work.

Avoid contact with the eyes and skin.

· Breathing equipment:

Short term filter device:

Filter P2.

· Protection of hands:

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

· Material of gloves

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer.

· Penetration time of glove material

The exact break trough time has to be found out by the manufacturer of the protective gloves and has to be observed.

· For the permanent contact of a maximum of 15 minutes gloves made of the following materials are suitable:

Natural rubber, NR Nitrile rubber, NBR

· Eye protection: Safety glasses

· **Body protection:** Protective work clothing.

9 Physical and chemical properties

- · 9.1. Information on basic physical and chemical properties
- · General Information
- · Appearance:

Form: Powder
Colour: Whitish
Odour: Odourless

• pH-value (50 g/l) at 20°C: 5.0 - 7.0

· Change in condition

Melting point/Melting range: undetermined Boiling point/Boiling range: undetermined

· Flash point: Not applicable

· Flammability (solid, gaseous) Product is not flammable.

· Danger of explosion: Product does not present an explosion hazard.

· Density: Not determined

• Bulk density at 20°C: ca. 640 kg/m³

· Solubility in / Miscibility with

Water at 20°C: 500 g/l

• 9.2. Other information There are no more data available.

10 Stability and reactivity

- · 10.1. Reactivity
- · 10.2. Chemical stability
- · Thermal decomposition / conditions to be avoided: No decomposition if used according to specifications.
- · 10.3. Possibility of hazardous reactions No dangerous reactions known
- · 10.4. Conditions to avoid No further relevant information available.

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· 10.5. Incompatible materials: No further relevant information available.

· 10.6. Hazardous decomposition products: No dangerous decomposition products known

11 Toxicological information

- · 11.1. Information on toxicological effects
- · Acute toxicity:
- · LD/LC50 values that are relevant for classification:

Oral | *LD50* | > 5000 mg/kg (Maus)

- · Primary irritant effect:
- · on the skin: Irritant to skin and mucous membranes.
- · on the eye: Irritating effect.
- · Sensitization:

Sensitization possible through inhalation.

Sensitization possible through skin contact.

· CMR effects (carcinogenity, mutagenicity and toxicity for reproduction)

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12 Ecological information

- · 12.1. Toxicity
- · Acquatic toxicity: No further relevant information available.
- · 12.2. Persistence and degradability No further relevant information available.
- · Behaviour in environmental systems:
- · 12.3. Bioaccumulative potential No further relevant information available.
- · 12.4. Mobility in soil No further relevant information available.
- $\cdot \textit{Additional ecological information:}$
- · General notes: Do not allow product to reach ground water, water course or sewage system.
- · 12.5. Results of PBT and vPvB assessment
- · PBT: PBT assessment not available.
- · vPvB: vPvB assessment not available.
- · 12.6. Other adverse effects No further relevant information available.

13 Disposal considerations

- · 13.1. Waste treatment methods
- · Recommendation

Must be specially treated adhering to official regulations.

Must not be disposed of together with household garbage. Do not allow product to reach sewage system.

- · Uncleaned packagings:
- · Recommendation: Disposal must be made according to official regulations.
- · Recommended cleansing agent: Water, if necessary with cleansing agents.

14 Transport information

- · 14.1. UN-Number
- · ADR, ADN, IMDG, IATA Void
- · 14.2. UN proper shipping name
- · ADR, ADN, IMDG, IATA Void

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	(Contd. of page
· 14.3. Transport hazard class(es)	
· ADR, ADN, IMDG, IATA	
· Class	Void
· 14.4. Packing group	
· ADR, IMDG, IATA	Void
· 14.5. Environmental hazards:	Not applicable.
· 14.6. Special precautions for user	Not applicable.
· 14.7. Transport in bulk according to Anne.	x II of
MARPOL73/78 and the IBC Code	Not applicable.
· Transport/Additional information:	Not dangerous according to the above specifications.
· UN ''Model Regulation'':	-

15 Regulatory information

- · 15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture
- · National regulations
- · Technical instructions (air):

Class	Share in %
Ι	80-100

- · Water hazard class: Water hazard class 1 (Self-assessment): slightly hazardous for water.
- · 15.2. Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

- · Department issuing MSDS: Product safety department
- · Contact: +49 6221 13840-35
- · Abbreviations and acronyms:

PBT: persistent, bioaccumulative, toxic substance (REACH)

vPvB: very persistent, very bioaccumulative substance (REACH)

REACH: Regulation concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals

CLP: Regulation on classification, labelling and packaging of substances and mixtures

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)

RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

ICAO: International Civil Aviation Organization

GHS: Globally Harmonized System of Classification and Labelling of Chemicals

EINECS: European Inventory of Existing Commercial Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

* Data compared to the previous version altered.

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